UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION V
1450 MARIA LANE, SUITE 210
WALNUT CREEK, CALIFORNIA 94596

NOV 15 1989

MEMORANDUM FOR: Leland C. Rouse, Chief
Fuel Cycle Safety Branch
Division of Industrial & Medical Nuclear
Safety, NMSS

FROM: Gregory P. Yuhas, Chief
Emergency Preparedness & Radiological
Protection Branch, Region V

SUBJECT: STATEMENTS BY DONALD W. WALLACE BEFORE JUDGE PETER B. BLOCH, ROCKWELL INTERNATIONAL HEARING

Paragraph 9 of the attached Inspection Report (70-0025/89-05) documents our review of this matter as requested in your memorandum dated October 18, 1989. The plan states that the licensee has "arrangements" with Los Angeles County authorities, when in fact the direct arrangements are between the licensee and Ventura County. This language in the plan appears to be a remnant of the days prior to the decommissioning of the DeSoto facility.

It appears that the licensee neither performed an adequate review and revision of the offsite support section of the RCP following closure of the DeSoto facility, nor addressed it appropriately in its July 1988 revision to the plan.

Accordingly, it appears that Rockwell International did not falsify information in the Radiological Contingency Plan (RCP), though someone reading the plan could incorrectly infer that there were direct formal arrangements between the licensee and offsite agencies.

Should you have any further questions regarding this matter, please contact Ray Fish, Chief, Emergency Preparedness Section, FTS 463-3761.

G. P. Yuhas

Gregory P. Yuhas, Chief
Emergency Preparedness & Radiological
Protection Branch

Attachment: As stated

cc: J. Martin
B. Faulkenberry
A. Johnson
M. Smith
G. Cook
M. Horn, NMSS

UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION V
1450 MARIA LANE, SUITE 210
WALNUT CREEK, CALIFORNIA 94596-5368

NOV 14 1989

Docket No. 70-25

Rockwell International Corporation
Rocketdyne Division
Atomics International
6633 Canoga Avenue
Canoga Park, California 91304

Attention: Dr. D. C. Gibbs, Division Director
Atomics International

Gentlemen:

Subject: NRC Inspection

This letter refers to the routine inspection conducted by Mr. C. A. Hooker of this office on October 17-20, 1989, of activities authorized by NRC license No. SNM-21 and to the discussion of our findings held with you and members of your staff at the conclusion of the inspection.

Areas examined during this inspection are described in the enclosed inspection report. Within these areas, the inspection consisted of selective examinations of procedures and representative records, interviews with personnel, and observations by the inspector.

No violations of NRC requirements were identified within the scope of this inspection.

In accordance with 10 CFR 2.790 of the Commission's regulations, a copy of this letter and the enclosure will be placed in the NRC's Public Document Room.

Should you have any questions concerning this inspection, we will be glad to discuss them with you.

Sincerely,

G.P. Yuhas

G. P. Yuhas, Chief
Emergency Preparedness and
Radiological Protection Branch

Enclosure:
Inspection Report No. 70-25/89-05

cc w/enclosure:
M. Horn, NMSS:HQ
Mr. R. T. Lancet, Director,
Nuclear Safety and Licensing

8911210094 1P

U. S. NUCLEAR REGULATORY COMMISSION

REGION V

Report No. 70-25/89-05

License No. SNM-21

Priority 0 Category RD Safeguards Group VII

Licensee: Rockwell International Corporation
Rocketdyne Division
Atomics International
6633 Canoga Avenue
Canoga Park, California 91304

Facility Name: Santa Susana Field Laboratory

Inspection at: Chatsworth, California

Inspection Conducted: October 17-20, 1989

Inspector: C A Hooker — 11/9/89
C. A. Hooker, Fuel facilities Inspector — Date Signed

Approved by: R. Fish — 11/9/89
R. Fish, Chief Emergency Preparedness Section — Date Signed

Summary:

Areas Inspected: This was a routine unannounced inspection of licensee action on previous inspection findings, criticality safety, operations review, maintenance/surveillance testing, radioactive waste management, transportation, waste generator requirements and emergency preparedness. The inspection also included tours of selected facilities. Inspection procedures 30703, 92701, 88015, 88020, 88025, 88035, 86740, 84850 and 88050 were addressed.

Results: In the areas inspected, the licensee's performance appeared adequate to accomplish their safety objectives. However, weakness was exhibited in in the areas of waste management regarding analysis of liquid waste (paragraph 5) and clarification of responsibility of local supportive agencies during emergencies (paragraph 8). No apparent violations or deviations were identified.

DETAILS

1. Persons Contacted

Licensee Employees:

*D. C. Gibbs, Division Director, Atomics International
*C. J. Rozas, Director, Health, Safety and Environment
*R. T. Lancet, Director, Nuclear Safety
R. J. Tuttle, Manager, Radiation and Nuclear Safety
*V. J. Schaubert, Manager, Nuclear Materials Management
*W. R. McCurnin, Manager, Nuclear Operations
*R. D. Barto, Director, Industrial Security
J. A. Curry, Physicians Assistant
*L. Rodman, Emergency Coordinator
*J. Gump, Fire Protection Engineer
F. H. Badger, Health Physics Engineer
J. W. Rowles, Alternate Radiation Safety Officer

*Denotes those attending the exit interview on October 20, 1989.

In addition to the individuals noted above, the inspector met and held discussions with other members of the licensee's staff.

2. Licensee Action on Previous Inspection Findings (92701)

(Closed) Inspection Follow-up (70-25/89-01-03): Inspection Report No. 70-25/89-01, dated February 16, 1989, discussed an item regarding the licensee's definition of an Unusual Event contained in their Radiological Contingency Plan (RCP) being less conservative than industry standards. Inspection Report No. 70-25/89-03, dated June 6, 1989, discussed the licensee's revision to the RCP regarding this matter which appeared not to be fully adequate, which was further discussed with the NRC license reviewer for evaluation. By letter dated July 7, 1989, the NRC issued a license amendment to incorporate changes to the RCP submitted by the licensee's letter dated May 24, 1989. The changes to the RCP were determined to not decrease the response effectiveness of the Plan. The inspector considers this matter closed.

3. Criticality Safety (88015)

The licensee's program was reviewed for compliance with 10 CFR Part 70, License Conditions, licensee procedures and recommendations outlined in various industry standards.

The inspector noted that there had been essentially no changes since the last inspection of this area (70-25/89-01). The licensee maintained no accountable Special Nuclear Material (SNM) within Building T-20. SNM (5.0 grams of Pu-239) for the planned electro chemical separation of transuranics (TRUMPS) project was being stored by and in the possession of the Department of Energy (DOE).

The licensee continued to maintained their criticality alarm system operational and calibrations were being being performed quarterly. Alarms were noted to be at their appropriate set points

No apparent violations or deviations were identified.

4. Operations Review (88020)

This area was reviewed to determine that operations were being conducted in accordance with the requirements of license, licensee procedures and recommendations outlined in various industry standards. The inspection of this area consisted primarily of observations made during facility tours. Independent radiation measurements were also made using a Xetex 305B, S/N 23515, due for calibration on March 13, 1990.

The inspector noted that there had been essentially no changes since the last inspection of this area (70-25/89-03). The licensee was still in the process of decontaminating Cell 1. The tent housing the face of Cell 1 was still in place and the cell doors had not been removed for decontaminating their undersides. Cell 1 decontamination activities consisted of controlled sandblasting and scabbling. No decontamination or other work activities were being performed in Cells 2-4. The licensee had nearly completed decontamination of the floor in the Equipment Storage Room and exterior wall base.

The Co-60 irradiator sources were still stored in the transfer drawer between cells 3 and 4 as noted during the previous inspection.

With respect to activities for the TRUMP project, the licensee did not anticipate this program getting started in the near future. Glove boxes in buildings T-20 and 23 were still being prepared for this project.

The licensee continued to be actively involved with testing and evaluating methods for insitu decontamination and surveying of encased and buried pipe.

The inspector noted that the exhaust ventilation system for the hot cell facility was being maintained fully operational. Room air and stack monitoring instruments were also being maintained fully operational.

Housekeeping appeared to be good in all areas toured, including the basement of Building T-20. During the tours the inspector also noted that radiation areas and radioactive materials areas were posted as required by 10 CFR Part 20.

The licensee's performance in this area appeared satisfactory. No apparent violations or deviations were identified.

5. Maintenance/Surveillance Testing (88025)

This area was reviewed to determine whether general maintenance of equipment was evident, and that surveillance tests were being performed in accordance with the license requirements. The inspection of this area consisted primarily of observations made during facility tours.

The licensee's last Equipment Maintenance and Management audit, conducted in November and December 1988, was described in Inspection Report No. 70-25/89-01.

Mechanical maintenance and testing of the ventilation system were being conducted in accordance with the licensee's program. The last annual test of the Building T-20 main filter bank was performed on November 17, 1988. The test results indicated that the filtering efficiency was greater than 99.996 %. The emergency diesel generator was being started and tested every two weeks.

During facility tours, the inspector noted that all air monitoring and and portable survey equipment were within their current calibration period. No leakage of liquids or other materials were evident that would indicate systems or components were in need of maintenance.

The licensee's performance in this area appeared satisfactory. No apparent violations or deviations were identified.

6. Radioactive Waste Management (88035)

This area was reviewed to determine the licensee's compliance with 10 CFR Part 20, license requirements and recommendations outlined in various industry standards.

There has been essentially no changes in the licensee's program since the last inspection of this area (70-25/89-03). The only radioactive effluents released from licensed NRC activities are gaseous effluents from Building T-20. Radioactive liquids are transferred to and processed under the jurisdiction of the on-site DOE organization. Solid waste disposal is discussed in paragraph 8 below.

Stack samples from Building T-20 are counted soon after collection for early assessment and recounted in the Building 100 Environmental Lab after two weeks decay. Each sample was being counted for 100 minutes in a Tennelec Model LB-5100 Series II automatic counter. The lower limit of detection (LLD) was being determined in accordance with the guidelines in NRC Regulatory Guide 4.20. The LLD for alpha and beta activities was noted to be 3.0E-16 uCi/ml and 3.3E-16 uCi/ml respectively. Instrument source checks were performed with each sample run and plotted on control charts for checking performance and reproducibility of the counting equipment.

The licensee's semiannual effluent report for the period of January 1 through June 30, 1989, dated July 17, 1989, was reviewed. This timely report was submitted in accordance with 10 CFR 70.59 and provided a summary of the radioactive gaseous effluents released from the facility. The report also provided the LLD values for the activity being measured. The effluent releases were noted to be less than 1.0% of the limits specified in 10 CFR Part 20, Appendix B, Table II. No errors or anomalies were identified.

With respect to liquids, a 3000 gallon holdup tank located at Building T-20 collects radioactive liquids from various areas within the facility.

Liquid waste is pumped from the holdup tank into a 500 gallon transport tank, and transferred to DOE for processing at their on-site Radioactive Materials Disposal Facility (RMDF). The inspector reviewed eight transfers of liquid to DOE during the period of January 6 to July 10, 1989. Based on this review and discussions with cognizant licensee representatives, the inspector made the following observations:

a. Each transfer consisted of about 450 gallons of liquid. The transfer tank was properly surveyed for radiation and contamination levels prior to each transfer. The licensee's transfer form stated, in part, that the radioactive material was Cs-137 and Co-60 and that the activity was to be determined. The radiation levels for the transport tank were typically recorded as being 160-200 mR/hr at contact and 9-12 mR/hr at one meter. According to the licensee, the high radiation readings were from a hot spot in the bottom of the tank.

When questioned, the licensee representatives informed the inspector that neither the transfer tank nor the holdup tank were currently being sampled and analyzed prior to the transfers. According to the licensee's representatives, DOE did not analyze the transfer tank's contents prior to processing. The licensee informed the inspector that, historically, Cs-137 and Co-60 were the major liquid contaminants in the holdup tank. However, the licensee was unable to locate any records of sample data to verify the radioactive contents of the transfer tank.

Although the licensee performed radiation and contamination surveys of the transfer tank prior to each transfer, the surveys conducted did not represent the radioactive contents being transferred to the DOE facility. The inspector considered it to be reasonable for the licensee to determine the radioactive contents of the liquid waste being transferred to the DOE facility. The licensee's representatives agreed with the inspector's observation.

10 CFR 20.201(b) requires, in part, each licensee to make surveys that are reasonable under the circumstances to evaluate the extent of radiation hazards that may be present. 10 CFR 20.201 states, in part, that "survey", means an evaluation of the radiation hazards incident to the production, use, release, disposal, or presence of radioactive material.

Building T-20 Radioactive Liquid Waste Procedure, No. 0890P0014, provided the details of liquid waste operations and filling the transport tank. However, the procedure did not mention or delineate any sampling requirements. The inspector noted that a drawing of the liquid waste system, attached to the procedure, detailed a sample station outlet from the holdup tank.

At the request of the inspector on October 19, 1989, the licensee obtained and analyzed a sample from the liquid waste holdup tank. On October 20, 1989, the inspector reviewed the sample analysis data obtained from a 1000 second count with a GeLi detector. The analysis indicated that the liquid activity in the tank was composed

of 2.7E-3 uCi/ml of Cs-137, 7.3E-6 uCi/ml of Cs-134 and 9.7E-5 uCi/ml of Co-60. There was no observed counts above background for the gamma energies of U-235 or Am-241. Based on the sample results, it appeared that no NRC licensed material (SNM) was involved in the transfers.

The inspector also suggested it would be reasonable for the licensee to perform a gross alpha count of the liquid in the holdup tank, and to sample and analyze any sludge that may be in the bottom of the tank for SNM. The need to sample and analyze the liquid waste being transferred to the DOE facility was discussed at the exit interview on October 20, 1989. The inspector's observation was acknowledged by the licensee. The inspector will examine this matter further in a subsequent inspection (70-025/89-05-01).

The licensee's overall performance in this area appeared adequate and their program seemed capable of meeting its safety objectives. However, it appeared that the licensee's liquid waste program warrants further attention. The failure to routinely analyze the liquid waste being transferred to the DOE facility was identified as a weakness in the licensee's program. No apparent violations or deviations were identified.

7. Transportation of Radioactive Materials (86740)

The licensee's program was reviewed for compliance with the Requirements of 10 CFR Parts 20, 30, 71 and 49 CFR Parts 171 through 189.

Based on discussions with cognizant licensee representatives, the inspector determined that there have been no shipments of radioactive materials under their NRC license since the last inspection of this area (70-25/88-02). SNM materials that have been used under the NRC license are received and shipped by the DOE.

On July 26, 1989, the licensee submitted a report to the NRC Region V office for failure to perform a receiving survey of a package containing 5.0 gms of Pu and 75 gms of depleted U within 3 hours after receipt as required by 10 CFR 20.205(c)(1). The material was shipped by a DOE facility on May 12, 1989, and received on-site at a DOE facility on May 18, 1989, and not surveyed until June 8, 1989. Base on review of the circumstances of this incident, the inspector considered the licensee's report to be conservative, since the material was not received under NRC jurisdiction. However, based on a discussion with a cognizant licensee representative and a review changes to the licensee's training program, the inspector determined that adequate corrective actions had been implemented to prevent recurrence as stated in the licensee report.

No apparent violations or deviations were identified.

8. Radioactive Waste Generator Requirements (84850)

The inspector reviewed the licensee,s program for compliance with the requirements of 10 CFR Parts 20 and 61.

Solid waste generated in Building T-20 was being packaged for shipment under DOE orders. The inspector reviewed records of waste transfers to the RMDF during the period of October 10, 1988, through July 19, 1989. The inspector noted that no SNM was involved in the waste transfers, which consisted mostly of miscellaneous trash. The primary radionuclide content of the waste consisted of mixed fission products, that included Cs-137, Sr/Y-90 and Co-60 based on analysis of contaminates in Building T-20. The activity of each container was estimated using a dose rate conversion factor. Each waste container was accompanied by a waste packaging lot follower that included a description of the contents, activity and waste form.

No apparent violations or deviations were identified.

9. Emergency Preparedness (88050)

During a September 1989 prehearing conference regarding the Hearing for the renewal of the licensee's NRC license, a member of the public expressed concerns that the licensee did not have agreements with all of the off-site support organizations delineated in the licensee's Radiological Contingency Plan (RCP). Based on discussions with cognizant licensee representatives and a review of selected documents, the inspector made the following observations:

Section 1.2.1 of the RCP describes the location of the Santa Susana Field Laboratory (SSFL) and the off-site support organizations that would be supportive in emergencies. Figure 1-1 of the RCP depicts the location of the SSFL and support organizations. The first paragraph of page 1-5 of this section states, in part:

> "The legend to Figure 1-1 also lists those hospitals, Ventura County Sheriff's offices, and fire stations, that are supportive in any emergency situation that may arise at the Santa Susana site".

The last paragraph of page 1-5 states:

> "The locations of the hospitals, fire stations, and police and sheriff's offices that would be supportive in any emergency situation that may arise are indicated on the map (Figure 1-1) and the facilities are specifically identified in the legend to this map"

The legend for Figure 1-1 listed three local hospitals, six fire stations in Los Angeles (LA) County, one fire station in Ventura County, three police/sheriffs offices in LA City and one in Ventura County. With respect to transportation of SSFL contaminated injured personnel, the licensee has an emergency vehicle (ambulance) operated by trained personnel and they have arranged for paramedical support from the Ventura County Fire Department. The following summarizes the licensee's agreements with these organizations:

a. Hospitals

The licensee's representatives informed the inspector that: (1) of the three hospitals listed, they had a verbal agreement with Humana Hospital West Hills (HHWH) to provide medical services for contaminated individuals in emergencies, (2) responsible personnel at HHWH had received training at the Oak Ridge Associated Universities Emergency Action Center Training Site on radiation accident management, (3) HHWH has participated in the licensee's emergency exercises in the last several years and (4) HHWH has facilities for handling contaminated individuals. The inspector noted from review of licensee documents that the HHWH had participated in the licensee's annual emergency drill exercise conducted on June 15, 1989. Part of the drill's scenario included transporting a contaminated injured person to HHWH for medical treatment.

With respect to the other two hospitals listed, the inspector was informed that they have expressed an interest in providing assistance for contaminated persons and participating in licensee drills; however, there has been no firm agreement, and training and facilities for handling contaminated patients have not been established.

b. Fire Departments

The inspector noted that the licensee maintained a Mutual Aid Agreement with the Ventura County Fire Department, dated December 10, 1973, for support in all emergencies at the SSFL.

The licensee informed the inspector that: (1) the fire stations located in LA County could not respond to emergencies at the SSFL upon the licensee's request, (2) SSFL, located in Ventura County, was outside of the LA County Fire Department's jurisdiction, and (3) the LA fire would respond if requested by the Ventura County Fire Department. The inspector reviewed a letter, dated October 6, 1989, from the LA County Fire Department's Chief Engineer and General Manager to the licensee that read, in part, that LA county would certainly respond at the request of the jurisdictual fire agency (Ventura County).

c. Sheriff Departments

The inspector noted that the licensee maintained a copy of a Ventura County (East Valley Division) RCP Contingency Plan, dated October 5, 1989. The Plan delineated procedures for providing support to the SSFL. According to the licensee, this Plan was updated annually.

The inspector was informed by the licensee that, they were not sure of the assistance that would be provided through the LA County Sheriff's Department. However, when previous NRC licensed activities were being conducted in LA County (Desoto Facility), the LA County Sheriff's Department maintained a RCP in support of that facility.

According to the licensee, some of the statements related to support from LA organizations were apparently those that existed in their Plan when NRC licensed activities were being conducted in the Desoto facility (LA County). The licensee agreed that the current RCP needed revision and clarification of the support available from off-site organizations. The licensee also informed the inspector that in mid September 1989, they formed a task group to review their RCP and had identified a number of items in the Plan that needed revising.

The licensee's action regarding clarification of the status of off-site support organizations depicted in their RCP will be examined in a subsequent inspection (70-025/89-05-02). No apparent violations or deviations were identified.

9. Exit Interview (30703)

The inspector met with the licensee's representatives, denoted in paragraph 1, at the conclusion of the inspection on October 20, 1989. The scope and findings of the inspection were summarized.

The licensee was informed that no apparent violations or deviations were identified.

The observations described in the report were acknowledged by the licensee.